Results: Quinolones at all tested concetrations increased bacterial surface hydrophobicity. The highest impact manifested EN, NOR and PFL in strain 10/116. The hydrophilic character of the exposed strain was changed to a hydrophobic state. Strain 84/233 showed only slight increase of hydrophobicity. Production of bacterial biofilm was lowered in dependence on strain and antibiotic,too. NOR at all tested concentartions and PFL at two ones in strain 84/233, EN and PFL at two concentrations in strain 10/116 were the most effective. In this case, production of biofilm in the strain 84/233 was in the range of 65.0—86.0%, in strain 10/116 of 66.1—87.7% of the control levels. Motility of antibiotic exposed strains exhibited various degrees of changes. EN and PFL at all tested concentartions decreased motility both of the strains (to 66.8—89.7% in 84/233 and to 47.1—86.5% in 10/116 of the control levels). The other antibiotics only slightly reduced or increased bacterial motility. The exposed strains in the majority of cases manifested higher sensitivity to hydrogen peroxide (with the exception of OFL in 84/233 and EN in 10/116). Lipase activity both of the strains was suppressed, more significantly in strain 84/233. The bacterial proteolytic activity was only minimaly inhibited (to 96.8—99.9% of the control levels).

Conclusion: Quinolones at sub-MICs interfered with possible virulence traits of *V. cholerae* non-O1. The alterations were strain and drug concentration dependent.

This work was supported by Agency for science and research of the Slovak Republic under the project: Newly emerging pathogens-vibrios. Study of virulence and possible active immunomodulative prevention (APVV 0032-06) and EU Centre of Excellence in Environmental Health, work package 4: New emerging and rare pathogens.

doi:10.1016/j.ijid.2008.05.533

40.024

Study of Urinary Tract Infection and Antimicrobial Susceptibility Pattern Among Patients Referred to Immam Khomaini Hospital Ahwaz, Iran

M. Mehdinejad*, M. Haidari, Z. Pourdangchi

Ahwaz Jondishapour University of Medical Sciences, Ahwaz, Iran (Islamic Republic of)

Keywords: Urine culture; Colony count; Urinary tract infections; Antimicrobial susceptibility

Background: Urinary tract infections (UTI,s) are among the most common bacterial infections in humans, and Escherichia.coli is the predominant causative species. Although a wide variety of antimicrobial agents are used in the treatment of UTI,s, but a growing problem of worldwide concern is the increasing resistance of pathogens to conventional antibiotics. The aim of this survey was study of urine cultures for the most predominant bacteria recovered and investigation of their antimicrobial susceptibility pattern.

Methods: In total 7056 urine specimens were collected from patients referred to Imam Khomeini hospital whom suspected to have UTI. The specimens were cultured on MacCankey agar, Blood agar and Muller Hinton agar and colony count was performed for the isolates. All the isolates with standard biochemical tests, and the positive cases were tested for sensitivity to different antibiotics by standard disk diffusion method.

Results: From total collected samples, 553 (7.8%) were positive in culture and had a colony count of >105 CFU/ml. These were belong to 376 female (68%) isolated organisms were E.coli with 326 cases (59%), and Klebsiella with 62 (11.2%). The isolated organisms showed the most antibiotics resistance to AM (92%), CF (82%), TE (81%), SXT (70). *Conclusion:* Based on the results, we concluded that the majority of causes of UTI were E.coli in females and pseudomonas spp. in male patients. The most antibiotics resistance was seen to Ampicilin (AM), Sulfamethoxazole (SXT), and Cephalothin (CF) respectively.

doi:10.1016/j.ijid.2008.05.534

40.025

Human Brucellosis in the Region of Strumica, Macedonia

L. Maninska*, K. Marangozova, T. Timova, S. Petkoska

Department of Infectious Diseases, Strumica, Former Yugoslav Republic of Macedonia

Background: Brucellosis is still a significant health problem on the Mediterranean basin, Balkan countries, including the region of Strumica.

The aim of study is to describe incidence of morbidity of human brucellosis cases in the Department of Infectious Diseases - Strumica and to shown that brucellosis have endemic character in our region.

Methods: Retrospective analysis of histories from patients who were treated in the department. The diagnosis based of clinical signs of the disease, serum agglutination tests (Wright, Coombs), and laboratory results.

Results: The first case of the disease in Strumica is registered in 1988.

During the 15 years 1992—2006 have been registered 975 patients with acute form of brucellosis. The highest morbidities was registered in 1992 with 190 patients, followed by 162 in 1993, 1994—69 patients, 1995—92, 1996—80, 1999—109. The last six years the number of new cases per year is decreased, and in 2006 was registered 18 patients.

Our pars research has shown that morbidity is highest in the age group under 35. Men get infected more often (69,8%). The way of infection by contact was more often trough alimentation. Most of infected patients (98% from 975) with acute brucellosis originated from the rural settlements. Brucellosis has stressed seasonal character and the maximal number of patients was seen in the March, April, and May. The clinical signs in our patients are: high temperature, sweating, pain in the joints, most of them located in the pelvic and extremity joints, lost weight, general weakness, hepatomegaly, orchiepididymitis. The main duration of hospitalization was 21 days.

Conclusion: The results expressed that brucellosis have endemic character in our region. We hope that with more energetic veterinarian and health measures, more information and health education activity, particularly in the rural